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L18: Entry 72 of 95

File: USPT

Mar 30, 1999

US-PAT-NO: 5890147

DOCUMENT-IDENTIFIER: US 5890147 A

TITLE: Scope testing of documents in a search engine using document to folder mapping

DATE-ISSUED: March 30, 1999

INVENTOR-INFORMATION:

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APPL-NO: 08/ 813618 [PALM]

DATE FILED: March 7, 1997

INT-CL: [06] G06 F 17/30

US-CL-ISSUED: 707/1; 707/3, 707/100, 707/102, 707/200

US-CL-CURRENT: 707/1; 707/100, 707/102, 707/200, 707/3

FIELD-OF-SEARCH: 707/1, 707/2, 707/3, 707/4, 707/5, 707/6, 707/100, 707/200, 707/102

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	5202986	April 1993	Nickel	395/600
<input type="checkbox"/>	5319762	June 1994	Mayer	395/425
<input type="checkbox"/>	5333317	July 1994	Dann	395/600
<input type="checkbox"/>	5465353	November 1995	Hull et al.	395/600
<input type="checkbox"/>	5544360	August 1996	Lewak et al.	395/600
<input type="checkbox"/>	5692173	November 1997	Chew	395/603

<input type="checkbox"/>	<u>5701469</u>	December 1997	Brandli et al.	395/613
<input type="checkbox"/>	<u>5729730</u>	March 1998	Wlaschin et al.	395/603

ART-UNIT: 276

PRIMARY-EXAMINER: Kulik; Paul V.

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ABSTRACT:

A method and mechanism for responding to a query in a hierarchically organized system of documents and folders. In response to the query, a set of documents is retrieved based on specified criteria. Only documents in that set which match a specified scope are returned in a result set. Scope testing is performed on each of the documents in the set by obtaining a document identifier of each document, and then using that document identifier to obtain a document identifier of the parent folder thereof. The document identifier of the parent folder is used as a key to a data structure, which stores flags indicative of whether parent folders are in the specified scope. If the flag for a given parent folder indicates that the parent folder is in scope, the document having that parent is returned in the result set. If the flag indicates that the current document is not in scope, that document is not returned. If there was not an entry in the data structure for that key, prefix matching is performed on the parent folder to determine whether it is in scope. The parent folder scope information is then added to the data structure as a flag indexed by the document identifier of the parent folder.

31 Claims, 15 Drawing figures

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L5: Entry 50 of 57

File: USPT

Jun 5, 2001

DOCUMENT-IDENTIFIER: US 6243724 B1

TITLE: Method and apparatus for organizing information in a computer system

Brief Summary Text (7):

Hierarchical filing systems on computers attempt to improve filing systems by providing a hierarchy of folders or subdirectories into which the user may store information, such as text documents. Examples of hierarchical filing systems are well known in the prior art, including a hierarchical filing system disclosed in U.S. Pat. No. 4,945,475. In these hierarchical filing systems, the user will file a document into a folder which may itself be within another folder. Looking for any documents within a first folder will require opening the first folder after opening the second folder which contains the first folder. In this manner, the user is not presented with a bewildering number of documents as in the flat filing system and the user's files are maintained in an orderly and systematic way within the hierarchy specified by the user. An example of this hierarchical filing is shown in FIG. 2 of the U.S. Pat. No. 4,945,475 wherein documents 21 and 22 are within folder 20 which itself is within folder 18 which is also stored in another folder, folder 17. Thus, in order to view documents 21 and 22 the user must direct the computer system to examine the contents of the subdirectory represented by folder 20 by specifying the full address of folder 20 (in the case of a non-graphical user interface) or by opening the series of folders necessary to obtain a view of the folder containing the desired documents (in the case of a graphical user interface). Current versions of the Finder on the Macintosh computer systems from Apple Computer are examples of hierarchical filing systems with graphical user interfaces, and other such filing systems with graphical user interfaces are well known.

Detailed Description Text (67):

The system and method of the present invention also provide a mechanism for searching documents in the file system of the computer whether those documents are in piles or conventional subdirectories/folders. This method is shown in FIG. 19 and begins at step 901, in which the system determines whether the user wants to search for documents matching a set of terms which are specified by the user. Typically, the user will indicate that a search is desired and the system will respond with a question asking the user whether the user wishes to define a set of terms or to specify a sample document. It will be appreciated that, other possible means of requesting a search or formulating a search may be used. If the user wants to specify a set of terms, the system allows in step 903 the user to do so and then creates in the step 905 a virtual document vector (or other representation of the terms) for the set of terms (and their user selected weights, unless by default the terms are equally weighted). That is, the user specifies terms and then those terms are used to specify a vector of a virtual document which is used later when processing. Processing from step 905 proceeds directly to step 911. If the user wishes to search using a sample document (e.g. create a pile from a sample document manually by searching and obtaining a list of the documents or automatically create a pile containing the search results) then processing proceeds from step 901 to step 907 in which the system requests the user to specify the sample document; if no sample document is specified processing loops back to node C waiting for an interrupt or other instruction indicating to begin the search process. After the sample document is specified in step 907, the system proceeds to step 911 in which

it compares each document's vector (or other representation of the document) in the system with the document vector (or other representation) of the sample document or the document vector (or other representation) of the virtual document created in step 905. This may occur by any of a number of ways of determining a similarity measure, including by determining the unit dot product of the sample document's vector against the vector of all documents in the system. It will be appreciated that alternative similarity measures or search routines may be employed, such as measuring the similarity between the document and each pile or folder and then searching within those piles or folders having the best matches to the document. It is noted that this comparison can eliminate documents which are not close enough by testing each dot product against a preselected threshold.

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L5: Entry 57 of 57

File: USPT

Jun 22, 1993

DOCUMENT-IDENTIFIER: US 5222234 A

TITLE: Combining search criteria to form a single search and saving search results for additional searches in a document interchange system

Detailed Description Text (29):

The FROM phrase 54 allows the specification of a folder, a Search Result Document (SRD), or a list of documents to which to apply the filter. When the FROM phrase specifies a list of documents, this list may be specified as a list of Library Assigned Document Names (LADNs) or as a stored list in a Search Result Document's (SRD) search result section. The SEARCH command will only apply the search filter to those documents contained within the scope indicated by the list. In the absence of a document scope, all documents that the user has at least read access to will be included in the search.

CLAIMS:

1. A method of forming a single search criteria for locating a library object stored in one of a plurality of shared libraries by a library server in a document interchange management system, said library object existing as a first folder document containing a plurality of related documents in said shared libraries, said method comprising:

specifying at least one of said plurality of shared libraries by a user at said library server in said document interchange management system to be searched by said library server for said library object;

identifying said first folder document to be located by said user at said library in said document interchange management system by said library server;

combining said one of said plurality of shared libraries and said first folder document into said single search criteria and executing said single search criteria by said library server in said plurality of shared libraries to locate said first folder document and said plurality of related documents and storing the search results in a second folder document; and

storing said single search criteria in a third folder document by said library server for use in additional searching of said shared libraries.

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